Yolo Sub-basin Sub-basin-level Review of Proposed Projects

Sub-basin Water Requirements and Sources

The Yolo Sub-basin (see Figure 1 in the Introduction and Figure 1 at the end of this sub-basin review) is located west of the Sacramento River in Yolo County. Agricultural land uses that utilize both surface water and groundwater dominate the sub-basin with a wide range of crops, including rice and vineyards. Urban areas such as the City of Woodland rely on the groundwater supplies within the sub-basin. The main water user and purveyor of surface water in the sub-basin is the Yolo County Flood Control and Water Conservation District (YCFC&WCD) which receives its water from Clear Lake, Indian Valley Reservoir, Cache Creek, and groundwater sources. It is because of this connection with groundwater that the two projects by (YCFC&WCD) within this sub-basin are proposed. No other project proponents have proposed projects within the sub-basin. Therefore, this sub-basin-level review will focus on the two projects of YCFC&WCD.

Water Requirements/Shortages

Water purveyors in this sub-basin generally have ample supplies during normal or average years. However, a large portion of the water requirements is made up from groundwater use, which has caused groundwater to decline in two areas. These are areas near the City of Woodland and within Yolo-Zamora, a portion of which lies just outside this sub-basin. The Yolo-Zamora area does not have direct access to a reliable surface water supply and, therefore, has historically relied on groundwater. This area was to receive surface water from the Tehama-Colusa Canal under its original design.

Proposed Projects

Both of the proposed projects would include the construction of facilities to use surface water to reduce the groundwater decline in those areas. The short-term portion of the projects would involve a feasibility study. The projects would provide surface water when available during wetter years and would facilitate the stabilization and reliability of the groundwater supplies needed for the areas. It is not anticipated from these projects that any outside local benefits would be obtained, but the local benefits are considered significant and critical to the local water users. Table 1 summarizes these projects.

TABLE 1
Proposed Projects in the Yolo Sub-basin

Project / Proponent	Project Type	Supply (acre-feet/year)	Cost (\$)	Issues
YCFC&WCD Conjunctive Use Project Feasibility Study for Expanding YCFC&WCD Surface Water Supplies to the Yolo- Zamora Water District (Project 19A)	GW Planning (SW/GW)	0	600,000	Data gathering/analysis to obtain local support
YCFC&WCD Conjunctive Use Project Feasibility Study for Expanding YCFC&WCD Surface Water Supplies to Agricultural Water Users in Areas (Project 19B)	GW Planning (SW/GW)	0	640,000	Data gathering/analysis to obtain local support
Total		0	1,240,000	

GW = Groundwater SW = Surface water

Current Status of Project

Both projects have been well outlined by the project proponents and have a well-defined scope of work. In order to proceed with the implementation of these projects, funding must be secured. The project proponent has developed a strategic and logical approach to meet the implementation challenges.

Existing Funding

YCFC&WCD's project relative to the Yolo-Zamora area has received partial funding to understand and evaluate the feasibility of the project. Additional funding is needed for this project.

Interrelationship of Projects

Although both projects are proposed by the YCFC&WCD, they have been identified as separate and individual projects because they use separate facilities and would require additional and separate facilities to implement each project.

Benefits

The benefits of implementing these projects are local water supply reliability for local communities and agricultural users. The potential benefit seen in the Yolo-Zamora area is that the project could facilitate the stabilization of the groundwater in that area, which, because of the potential connection with the Colusa Sub-Basin, has potential to provide future benefits to the Delta.

Implementation Challenges

The project proponent clearly understands the implementation challenges are (1) obtaining local support and (2) understanding the projects in order to proceed. The tasks defined in the project scope would facilitate meeting these implementation challenges.

